UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

CIRCULAR 243 PLATE I

MAP OF THE LA PRELE AREA, WYOMING, SHOWING AREAL GEOLOGY AND LOCATION OF WELLS AND SPRINGS

Base compiled from aerial photographs and from a map prepared by the Wyoming State Highway Department.

Geology by J. R. Rapp

0 2 Miles

EXPLANATION

- Domestic, stock or unused well
- Oil test
- Flowing well (oil test)
- Spring
- CA — Well or spring sampled for chemical analysis
- Stream sampled for chemical analysis
- Material sampled for laboratory analysis
- Seep area
- Canal

QUATERNARY

Recent

- Qsw — Slope wash (Clay, silt, sand, and gravel. Yields water to a few domestic and stock wells.)

Pleistocene

- Qal — Alluvium (Sand and gravel containing beds and lenses of silt and clay, and cobbles and boulders. Yields water to a few domestic and stock wells.)
- Qt — Terrace deposits (Sand, gravel, cobbles, and boulders. Serve as localized infiltration areas for recharge from precipitation.)

TERTIARY

Miocene

- Tm? — Upper Miocene(?) deposits (Poorly consolidated deposits of gravel, sand, silt, and clay. Serve as localized infiltration areas for recharge from precipitation.)
- Ta — Arikaree sandstone (Upper unit consists of massive sandstone that yields a small amount of water to one well in the area. Lower conglomeratic unit does not yield water to wells; however, several springs issue from along its base.)

Oligocene

- Twr — White River formation (Siltstone containing varying amounts of clay and channels and lenses of sandstone and conglomerate. Yields small quantities of water to domestic and stock wells.)

Eocene

- Tfu — Fort Union formation (Thick sequence of beds of sandstone and shale. Yields small quantities of water to domestic and stock wells.)

CRETACEOUS

Upper Cretaceous

- Kl — Lance formation (Thick sequence of beds of poorly consolidated sandstone and sandy clay. Yields no water to wells in the area.)

Lower Cretaceous

- Kcv — Cloverly formation (Consists of an upper and a lower sandstone unit separated by a middle shale unit. Yields water under artesian pressure.)

JURASSIC

- Jm — Morrison formation (Sequence of beds of variegated shale and sandstone. Not considered a good source for ground water.)
- Js — Sundance formation (Consists of beds of sandstone and variegated shale. Sandstone probably would yield small amounts of water to wells.)

TRIASSIC

- Tr — Chugwater formation (Red siltstone containing red shale and red fine-grained silty sandstone. Ground-water possibilities not known.)

PERMIAN

- Pm — Minnekahta limestone (Purplish-gray to pink thin-bedded limestone containing a few thin beds of shale. Ground-water possibilities not known.)
- Po — Opeche formation (Red sandy shale and siltstone containing a few thin beds of reddish sandstone. Ground-water possibilities not known.)

CARBONIFEROUS

Pennsylvanian

- Pc — Casper formation (Pink to gray sandstone, limestone, dolomitic limestone, and shale. Yields water to springs.)

Mississippian

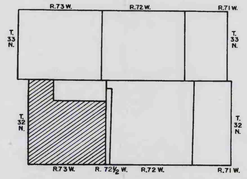
- Mm — Madison limestone (Consists of limestone, dolomite, dolomitic limestone, sandstone, and shale. Ground-water possibilities not known.)

CAMBRIAN

- Cd — Deadwood formation (Gray to brownish resistant sandstone containing a few thin beds of shale and having a basal conglomerate. Ground-water possibilities not known.)

PRE-CAMBRIAN

- pC — Pre-Cambrian (Igneous and metamorphic rocks. Ground-water possibilities not known.)



Index map of La Prele area showing mapped area that was taken from report by J. A. Barlow, Jr.